

# **Natural Heritage Program Highlights**

May – October, 2008

*Prepared for the NHP Partners Committee, November 2008*

It seems that the last five months have just flown past! Since our last Partners meeting in April, Heritage Program staff have been incredibly busy, both in the field and in the office. With the help of our many partners, we have covered a lot of ground these past months, collecting an enormous amount of new data and making major strides in expanding and improving our services.

This update summarizes some of the top highlights from each program area as well as our current priorities for the upcoming few months. We hope that it will help you get up-to-speed with our many activities and current plans, so that you can get the most out of our meeting next week. Some of the items mentioned will be covered in agenda topics; as for the others, if you have questions or would like more information, please catch one of us over lunch or during a break, and we'd be more than happy to discuss.

## **Program Management Highlights**

### **Recent Accomplishments**

- Conducted a User Survey that garnered 336 responses and generated a great harvest of valuable information about our users' needs, priorities, level of satisfaction and suggestions.
- Received good press coverage from a press release that publicly highlighted, for the first time, our Natural Heritage Tracker and revised Montana Field Guide, and from two short TV news videos (produced by MFWP) focusing on mussel surveys and scorpions in southeastern Montana.
- Took final steps in fully integrating and aligning NHP financial management with UM systems and standard-operating-procedures.

### **Upcoming Priorities**

- Integrate input from the User Survey to further improve MTNHP service & communication.
- Join the State Library in welcoming legislators to Helena, answering questions that may arise, and tracking any legislative issues that could impact the Natural Heritage Program.
- Begin developing a new long-range budgeting projection/plan that addresses cost increases and other changes since the last major budget analysis was conducted in late 2005.
- Develop & implement a strategy to begin soliciting private funds to help expand our base of support.
- Explore establishment of a Natural Heritage Research Center at the University of Montana, as a focus for strengthening funding (including private contributions) for data collection and research, and to help increase visibility and institutional support for our work within the University.

## **Information Systems and Services Highlights**

### **Recent Accomplishments**

- Released Version 2 of the Montana Natural Heritage TRACKER in late August.
- Worked with Doris Fischer of Montana Fish, Wildlife and Parks to develop a set of maps and reports of Species of Concern Occurrences and ecological sites for three counties as part of a coordinated effort to support local planners. We are working with Doris on additional counties now. We also conducted a joint training with FWP at the September Montana Association of Planners annual meeting covering the information and services we have to offer counties.
- Provided TRACKER training to BLM Billings staff and to BLM, FWP & NRCS staff in Miles City.
- Developed a new Botany geodatabase that is now used in our web and data reviews applications. This new database better represents plant occurrences and enables faster and more efficient input and management of botany data.
- Hired a half time student web programmer to assist our Web Projects Manager.

## **Information Systems and Services Highlights (continued)**

### **Upcoming Priorities**

- Creation of a mid-level access to TRACKER that would provide Species of Concern occurrence lists at the section level. This access would require successful completion of an on-line certification before an ID and password are issued.
- Migration of our animal species of concern database from Oracle database in BIOTICS to a new geodatabase in SQL/Server. This transformation process will include developing new methods for processing animal SOC occurrences.
- Identify and implement new reference management software for MTNHP, in cooperation with MSL Digital Library staff. The new system will incorporate holdings in 3 current reference management systems as well as making our published reports (more than 250) easier to discover and access.
- Expand our web applications to provide more ecological data, including aquatic sampling data, the new ReGap vegetation data, and ecological systems descriptions.

## **Ecology Highlights**

### **Recent Accomplishments**

- Completed draft descriptions for wetland and riparian ecological systems.
- Received grants from the EPA to establish a wetland reference network (summer 2008); to test out indicators for the 2011 National Wetland Condition Survey (2009 and 2010); and to begin an annual, rotating basin wetland assessment program, starting with the Milk and Marias (2009).
- Received contracts for mapping entire Yellowstone River corridor.
- Hired a new wetland ecologist, Karen Newlon; a new vegetation/restoration ecologist, Tara Luna; a new image analyst, Claudine Tobalske; and two new wetland digitizers, Erika Colaiacomo and Janet Burcham.
- Completed mussel surveys on over 400 representative reaches in 38 subbasins (4<sup>th</sup> code HUCs) across Montana. Presented workshops on mussel surveying and identification to over 30 agency biologists in Bozeman, MT and Orofino, ID.

### **Upcoming Priorities**

- Complete a draft of Montana Land Cover map and accompanying ecological system descriptions.
- Produce training materials on National Vegetation Classification Standard.
- Build support for a full-time weed database/mapper.
- Complete the Western Stream Classification for Montana. Data entry is almost complete, and we are currently defining the environmental variables to be used in the analysis.

## **Botany Highlights**

### **Recent Accomplishments**

- Conducted fieldwork in 2008 that located 26 new occurrences for water howellia (a federally threatened species) in the Swan Valley, many on Plum Creek lands.
- Added Plant Species of Concern occurrence data to the Natural Heritage Tracker website.
- Added approximately 800 new plant observation records to the botany geodatabase for plant SOC and other tracked plant species (viewable in Tracker).

## **Botany Highlights (*continued*)**

### **Upcoming Priorities**

- Conduct reviews and update status ranks for several dozen globally rare MT plants species.
- Post Predicted Habitat maps for all BLM sensitive plant species and many other plant Species of Concern in the Montana Field Guide.
- Update the plant Species of Concern Report with a new version that is dynamically-updated, printable and web-based rather than a static report.

## **Zoology Highlights**

### **Recent Accomplishments**

- Updated the Animal Species of Concern report, involving detailed reviews of 55 species (available on our website).
- Added major data sets to the point observation databases including Breeding Bird Survey data, Ebird data, and amphibian inventory data, bringing total animal observation in our databases to over 740,000 animal (compared to less than 200,000 in early 2005). We have also made added structured survey data for various taxa so that resource managers can see when and where surveys using standardized protocols have been performed.
- Nearing completion of the baseline statewide amphibian surveys and this information is being summarized (observations are currently available in TRACKER).
- Conducted baseline surveys for bats and birds in areas of eastern Montana that are likely to be developed for wind power generation.
- Completed baseline surveys for amphibians and reptiles around the areas likely to be developed for Coal Bed Natural Gas (also found bats using south facing rock outcrops for day roosts at 10% of sites surveyed).
- Completed first year of monitoring a diversity of nongame species in conjunction with FWP.
- Completed reports on grassland birds and terrestrial mollusks where the predicted distributions of these species were modeled.

### **Upcoming Priorities**

- Conduct further updates to the Animal Species of Concern report so that all species currently listed as Species of Concern or Potential Species of Concern have received a detailed scoring review. (If there are other species anyone would like reviewed, please let us know.)
- Construct predicted distribution models for all animal species in conjunction with FWP. Use resulting models to populate predicted and documented species lists for various administrative boundaries across Montana.
- Associate all animals with Ecological Systems and display this on web applications and upcoming Species of Concern reports to support focus on conservation of communities as opposed to just individual species.
- Expand online field guide to include more information on species distributions (e.g., latilong maps and North America or global range maps)
- Priority projects include:
  - Mapping prairie dog towns using NAIP imagery;
  - Initiating proposals with partners to monitor harlequin duck populations;
  - Working with other partners on the new Montana Bird Distribution book edition and hopefully a companion book for other taxa;
  - Initiating proposals for conducting statewide status assessment of a variety of invertebrate species.